

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2019/2020**

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE/AERD/AMED**

**SBT 2350: AGRICULTURAL BOTANY**

**DATE: DECEMBER, 2019 TIME: 2 HOURS**

INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

**QUESTION ONE: 30 MARKS**

a. Differentiate the following terms. (4 marks)

 i. Autoploidy from alloploidy. (1 mark)

 ii. Legume from follicle. (1 mark)

 iii. Spike from capitulum. (1 mark)

 iv. Hypogymous from pengynous. (1 mark)

b. Outline observable evidence that contributed to early agriculture. (4 marks)

c. State six factors that influenced the type of crop to be domesticated.(3 marks)

d. State the factors that facilitated crop dispersal from their centers of origin. (2 marks)

e. State any four classes of dry indehiscent fruits. (4 marks)

f. State four methods in which the shelf life of cereals can be increased after harvesting. (4 marks)

g. Describe the five steps involved in biological gene transfer. (5 marks)

h. List four greenhouse gases that affect climate change. (4 marks)

**QUESTION TWO: 20 MARKS**

a. Discuss four methods of hybridization. (10 marks)

b. Discuss classification of plants based on their use. (10 marks)

**QUESTION THREE: 20 MARKS**

Discuss the various types of tropical copping systems

**QUESTION FOUR: 20 MARKS**

Describe the post harvest procedures applied on fruits.